

a polishing unit [which polishes] for polishing a [said] top layer of a wafer in the presence of a liquid;

an optical measurement station in communication with [, mounted within said polisher but apart from] said polishing unit; and

means [to move] for moving said wafer from said polishing unit to said optical measurement station, while said wafer is still wet;

[wherein] said optical measurement station [comprises] comprising:

a liquid holding unit for receiving said wafer, said liquid holding unit having a [window in a] bottom surface, and at least a portion of said bottom surface formed by a window, through [thereof and holding liquid therein] which [receives] at least a portion of said top layer of said wafer is viewable; and

an optical thickness measuring unit in operative communication with said liquid holding unit, said optical thickness measuring unit for measuring [located on a non-liquid side of said window which measures] the thickness of said top layer of said wafer through said window while said wafer is [immersed] in said liquid holding unit.

In claim 18, at line 1, please delete "A polisher", and replace it with - -The apparatus--.

3 19. (Once Amended). The apparatus [A polisher] according to Claim 17. wherein said optical thickness measuring unit [includes] comprises:

an illumination optical unit for directing light towards said wafer;

an imaging unit for imaging at least said top layer of said wafer;

a spectrophotometric detector; and

[separation optics] an optical assembly in operative communication with said imaging unit and said spectrophotometric detector for providing light reflected from said wafer separately to said imaging unit and to said spectrophotometric detector, [the separation optics] said optical assembly comprising, an objective lens, a pinhole mirror and first and second relay lenses, wherein said first relay lens focuses the light passing through said pinhole mirror onto said spectrophotometric detector and